

**To:** Vaughn, Stephanie[Vaughn.Stephanie@epa.gov]  
**Cc:** BudneySL@cdmsmith.com[BudneySL@cdmsmith.com]; Amy Picunas[PicunasAE@cdmsmith.com]; Frank Tsang[TsangC@cdmsmith.com]; Gary.Foster@CH2M.com[Gary.Foster@CH2M.com]; George.Hicks@CH2M.com[George.Hicks@CH2M.com]; James.Brinkman@CH2M.com[James.Brinkman@CH2M.com]; John Rolfe[jrolfe@demaximis.com]; Willard Potter[otto@demaximis.com]; Robert Law[rlaw@demaximis.com]; Hoppe, Michael[Hoppe.Michael@epa.gov]; jmagalen@seaengineering.com[jmagalen@seaengineering.com]  
**From:** Stan Kaczmarek  
**Sent:** Fri 9/6/2013 6:48:30 PM  
**Subject:** RE: Survey Results Area 2A  
[ATT00001.txt](#)

Stephanie, can I interpret your email as EPA accepting the survey results of both areas 1 and 2A?

Regarding your question, GLDD is using a single beam survey (on 10 ft spacing) to develop the final surface. GLDD interpolates the data in order to generate the surface by taking the single beam data and using it to generate average elevations on a 10ft x 10ft grid. The acceptance criteria specified by contract is that no 10 ft x 10 ft grid can have an average elevation greater than 3 inches above the target elevation of 2 ft. Every survey point is not required to meet this acceptance criteria, only the 10 ft X 10 ft grids.

CH2M HILL uses the raw survey data and In Roads software to generate independent bathymetric surfaces as a check against what GLDD is doing. The attached figure gives an indication of how close the transects are for the survey.

Please call me if you have any questions.

**Stan Kaczmarek, PE**  
**de maximis, inc.**  
**186 Center Street, Suite 290**  
**Clinton, NJ 08809**  
**(O) (908) 735-9315**  
**(C) (973) 978-9621**

>>> On 9/6/2013 at 10:03 AM, in message  
<8a7746fdb5da4d268348bb4824149f1d@BL2PR09MB017.namprd09.prod.outlook.com>,  
"Vaughn, Stephanie" <Vaughn.Stephanie@epa.gov> wrote:

Jason has reviewed the last few survey submittals. Both the clean up survey sent on 8/29 for Area 1 and the survey of Area 2A look good.

Question – is GLDD being required contractually to interpolate their maps in a particular manner and then plot results in a 10x10' grid? They are providing processed survey data (along their survey tracklines) and gridded data to a 10x10' grid (which is interpolated), but it seems they are using the interpolated grid to determine if they pass the dredge depth criteria.

Thanks

**From:** Stan Kaczmarek [mailto:StanK@demaximis.com]  
**Sent:** Wednesday, September 04, 2013 3:55 PM  
**To:** Hoppe, Michael; Vaughn, Stephanie; jmagalen@seaengineering.com  
**Cc:** Amy Picunas; BudneySL@cdmsmith.com; Frank Tsang; Gary.Foster@CH2M.com; George.Hicks@CH2M.com; John Rolfe; PassaroML@cdmsmith.com; Robert Law; Willard Potter  
**Subject:** Survey Results Area 2A

Attached are survey results for the portion of dredge area 2 that is south of the No Dredge Zone. The near shore segment that could not meet the design cut specifications will be addressed with a sampling plan currently under development for similar segments of Area 1. The other single grid in this portion of Area 2 that did not meet specifications is because of a buried cable which was left in place.

**Stan Kaczmarek, PE**

de maximis, inc.

186 Center Street, Suite 290

Clinton, NJ 08809

(O) (908) 735-9315

(C) (973) 978-9621

>>> On 8/30/2013 at 11:04 AM, in message <5220B464.6B0 : 149 : 51652>, Stan Kaczmarek wrote:

Attached are the final survey results for Area 1 showing that the 7 designated grids identified yesterday in Cuts 1, 2 and 3 have now been dredged to within design specifications. Also included is a PDF of Area 1 highlighting the undercut caused by the underlying hard surface in Cuts 3 and 4. As indicated yesterday, CPG will draft a sampling plan for this undercut area to identify the concentration of COPC's in the material remaining.

In addition CPG is currently dredging in the portion of Area 2 that is south of the No Dredge Zone. When that work is completed and those survey results are available, we will forward them to request EPA acceptance of the final cut in that portion of Area 2.

If you have any questions, please contact me.  
Thank you.

**Stan Kaczmarek, PE**

de maximis, inc.

186 Center Street, Suite 290

Clinton, NJ 08809

(O) (908) 735-9315

(C) (973) 978-9621

>>> On 8/29/2013 at 5:31 PM, in message  
<[e02c04845c0247fab0aeebc8b81dcca@BL2PF](mailto:e02c04845c0247fab0aeebc8b81dcca@BL2PF)  
"Vaughn, Stephanie"  
<[Vaughn.Stephania@epa.gov](mailto:Vaughn.Stephania@epa.gov)> wrote:  
Hi Stan,

Jason has completed his review of the survey results. After finishing the 7 designated grids in Cuts 1, 2 and 3 we agree that you may move the silt curtain to Area 2. However, another full survey should still be completed on Area 1 to confirm the prior results.

I have not yet had a chance to review the area in Cuts 3 and 4, and will revisit this issue next

week.

Note that I will be available by phone tomorrow until around 10 am, and then will be out of the office until Wednesday, September 4<sup>th</sup> at about 2 pm.

Have a great weekend!

Stephanie

**From:** Stan Kaczmarek [<mailto:StanK@demaximis.com>]  
**Sent:** Thursday, August 29, 2013 1:51 PM  
**To:** Vaughn, Stephanie; Hoppe, Michael; [jmagalen@seaengineering.com](mailto:jmagalen@seaengineering.com)  
**Cc:** Amy Picunas; [BudneySL@cdmsmith.com](mailto:BudneySL@cdmsmith.com); Frank Tsang; [Gary.Foster@CH2M.com](mailto:Gary.Foster@CH2M.com); [George.Hicks@CH2M.com](mailto:George.Hicks@CH2M.com); John Rolfe; [PassaroML@cdmsmith.com](mailto:PassaroML@cdmsmith.com); Robert Law; Willard Potter  
**Subject:** Survey Results

Stephanie:

Attached is a zip file with all of the survey results as of August 2 including a PDF file of the survey results depicting each 10'X10' grid within Area 1. The CPG has identified 7 grids in Cuts 1, 2 and 3 that need to be dredged deeper to meet design criteria. These grids are designated by circles in the PDF. Once those areas are cut and meet design criteria, CPG requests permission to begin redeploying the silt curtain to Area 2 while a new survey confirms that these 7 grids have met design criteria.

Regarding the area in Cuts 3 and 4 highlighted by a black box on the survey map, this area is where the environmental bucket encountered refusal due to an underlying hard surface. CPG proposes to develop a plan to collect and analyze a composite sample of the loose material that is left in this area to determine the remaining levels of COPC's. The CPG will provide this plan to EPA and CDM for review and approval.



Following EPA's acceptance of undercuts in this area, then CPG will propose modifications for the cap design in this area in order to ensure that there is no net increase in elevation when the cap is placed.

Regarding potential risks associated with potential undercuts, there are historical data from 3 cores collected in the near shore area of Cuts 2 and 4. These sample locations (e.g., 357) are highlighted as blue dots on the PDF. Data from those cores are summarized below; all results indicate that COPC levels (TCDD, Total PCBs and mercury) near shore are extremely low. TCDD concentrations are less than one part per trillion for all vertical segments down to 3.5 ft below ground surface at sample location A-0357, which is located in the area where dredging encountered refusal before meeting the 2 foot cut criteria.

Going forward, CPG plans to increase production rates by focusing its efforts on the offshore areas, and when in the near shore areas, digging until there is continued refusal of the environmental bucket. CPG will notify EPA promptly whenever it does encounter refusal, and its intention will then be to collect a composite sample of the remaining materials in these other areas.

The CPG looks forward to EPA's approval to move the silt curtain once CPG finishes its cleanup cuts in Cuts 1, 2 and 3, which is anticipated to be completed by the end of today.



**Stan Kaczmarek, PE**

de maximis, inc.

186 Center Street, Suite 290

Clinton, NJ 08809

(O) (908) 735-9315

(C) (973) 978-9621